CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2006-0804 CALIFORNIA WATER CODE SECTION 13267 FOR

CHEVRON PIPELINE COMPANY CORRAL HOLLOW AND GRANTLINE ROADS SAN JOAQUIN COUNTY

Chevron Pipeline Company (Discharger) owns and operates a refined petroleum products pipeline near the intersection of Corral Hollow and Grant Line Road in Tracy. Groundwater, at a depth of 10 feet, is polluted with total petroleum hydrocarbons as diesel and gasoline (TPHd and TPHG), benzene, toluene, ethylbenzene and xylene (BTEX) and polynuclear aromatic hydrocarbons (PNAs). This pollution impaired the beneficial uses of this water resource. In 1987 the Discharger excavated about 100 cubic yards of soil containing petroleum hydrocarbons, and in 1997 operated a dual-phase groundwater and soil vapor extraction system. Since 1997 the Discharger has monitored the site to verify that the remaining hydrocarbons are naturally degrading.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to verify natural biodegradation of the petroleum hydrocarbons. Existing data and information about the site show the presence of various chemicals, including TPHd, TPHg, benzene and naphthalene emanating from the property resulting from the Discharger's current or past operation. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. This MRP replaces the requirements listed in MRP No. 96-814, which was issued on 24 September 1996.

Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Regional Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

GROUNDWATER MONITORING

As shown on Figure 1, there are five monitoring wells remaining at the site, designated MW-5, MW-6, MW-7, MW-8 and MW-12. The groundwater monitoring program for MW-6, MW-8, MW-12 and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below. If sampling requirements for elimination of constituents have been met under the previous MRP, the Discharger is not required to sample for those constituents again based on the new requirements. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water. Sample collection and analysis shall follow standard EPA protocol.

Constituents	EPA Analytical Method	Maximum Practical Quantitation Limit (μg/l) ¹	Sampling Frequency
Depth to Groundwater			Semi-annually
Total Petroleum Hydrocarbons ²	8015M	50	Semi-annually
Benzene	8020 or 8260B	0.5	Semi-annually
Toluene	8020 or 8260B	0.5	Semi-annually
Ethylbenzene	8020 or 8260B	0.5	Semi-annually
Xylene	8020 or 8260B	0.5	Semi-annually
PAHs ³	8270	Varies	Semi-annually

For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

The Discharger shall submit semiannual electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The semiannual reports shall be submitted electronically over the internet to the Geotracker database system by the 1st day of the second month following the end of the second and fourth calendar quarters (i.e., by 1 February and 1 August), until such time as the Executive Officer determines that the reports are no longer necessary.

Semi-annual reports shall be submitted to the Regional Board by the 1st day of the second month following the end of the second and fourth calendar quarters (i.e., by 1 February and 1 August) until such time as the Executive Officer determines that the reports are no longer necessary. Each semi-annual report shall include the following minimum information:

(a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated;

² Quantify Total Petroleum Hydrocarbons as gas (TPHg) and as diesel (TPHd). Analyses shall be done without silica gel cleanup.

³ Polynuclear Aromatic Hydrocarbons.

- (b) field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- (c) a table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom;
- (d) a table showing historical lateral and vertical (if applicable) flow directions and gradients;
- (e) cumulative data tables containing the water quality analytical results and depth to groundwater;
- (f) a copy of the laboratory analytical data report;
- (g) if applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system; and
- (h) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

An Annual Report shall be submitted to the Regional Board by **1 February** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the second semi-annual monitoring report. The Annual Report shall contain the following minimum information:

- (a) both tabular and graphical summaries of all data obtained during the year;
- (b) a discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;
- (c) an analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;
- (d) a description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness;
- (e) an identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program; and
- (f) if desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Board. The Discharger shall implement the above monitoring program as of the date of the Order.

Ordered by: _	
. -	PAMELA C. CREEDON, Executive Officer
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_	(24 July 2006)